COMBINED DECLARATION AND POWER OF ATTORNEY

(ORIGINAL, DESIGN, NATIONAL STAGE OF PCT, SUPPLEMENTAL, DIVISIONAL, CONTINUATION, OR C-I-P)

As a below named inventor, I hereby declare that:

TYPE OF DECLARATION

| his declara | ation is of the following type: |
|--------------------------|---|
| • | (check one applicable item below) |
| X 0 | original. |
| | design. |
| or c | n the exception of a supplemental oath or declaration submitted in a reissue, a supplemental oath declaration is not treated as an amendment under 37 CFR 1.312 (Amendments after allowance). I.E.P. § 714.16, 7th Edition. |
| □ s | supplemental. |
| | ne declaration is for an International Application being filed as a divisional, continuation or tinuation-in-part application, do not check next item; check appropriate one of last three items. |
| | national stage of PCT. |
| | ne of the following 3 items apply, then complete and also attach ADDED PAGES FOR DIVISIONAL, VTINUATION OR C-I-P. |
| deci | 37 C.F.R. § 1.63(d) (continued prosecution application) for use of a prior nonprovisional application laration in the continuation or divisional application being filed on behalf of the same or fewer of inventors named in the prior application. |
| | livisional. |
| □ c | continuation. |
| cont | ere an application discloses and claims subject matter not disclosed in the prior application, or a tinuation or divisional application names an inventor not named in the prior application, a tinuation-in-part application must be filed under 37 C.F.R. § 1.53(b) (application filing requirements conprovisional application). |
| □ c | ontinuation-in-part (C-I-P). |
| | INVENTORSHIP IDENTIFICATION |
| WARNING: | If the inventors are each not the inventors of all the claims, an explanation of the facts, including the ownership of all the claims at the time the last claimed invention was made, should be submitted. |
| believe than original, t | e, post office address and citizenship are as stated below, next to my name. It I am the original, first and sole inventor (if only one name is listed below) or first and joint inventor (if plural names are listed below) of the subject matter and for which a patent is sought on the invention entitled: |
| | TITLE OF INVENTION |
| PR | OCESS FOR THE ASSEMBLY OF ULTRASTABLE |
| ESOSTRU | ICTURED ORGANOFUNCTIONAL SILICA COMPOSITIONS |
| | (Declaration and Power of Attorney [1-1]—page 1 of 7) |

SPECIFICATION IDENTIFICATION

the specification of which:

(complete (a), (b), or (c))

| (a) | X | is attached hereto. | |
|-------|---------------|---|---|
| NOT | 1 | The following combinations of information supplied in iling date with a specification are acceptable as minimum with any one of the items below will be accepted as co 17 CFR 1.63: | ns for identifying a specification and compliance |
| | | "(1) name of inventor(s), and reference to an att the oath or declaration at the time of execution and s | ached specification which is both attached to submitted with the oath or declaration on filing |
| | | "(2) name of inventor(s), and attorney docket nu or | |
| | | "(3) name of inventor(s), and title which was on | the specification as filed." |
| | | Notice of July 13, 1995 (1177 O.G. 60). | · |
| (b) | | was filed on, as ☐ Se | erial No. 0 / |
| | | and was amended on | |
| NOTE | n aı aı | mendments filed after the original papers are deposite of accorded a filing date by being referred to in the declare those filed with the application papers or, in the contendments claiming matter not encompassed in the CO.F.R. § 1.67. | ration. Accordingly, the amendments involved ase of a supplemental declaration, are those |
| NOTE | aı | The following combinations of information supplied in a e acceptable as minimums for identifying a specification alow will be accepted as complying with the identification. | on and compliance with any one of the items |
| | | "(A) application number (consisting of the series of | |
| | | "(B) serial number and filing date; | , , , , , , , , , , , , , , , , , , , |
| | | "(C) attorney docket number which was on the s | pecification as filed; |
| | | "(D) title which was on the specification as filed and is both attached to the oath or declaration at the tir or declaration; or | d reference to an attached specification which ne of execution and submitted with the oath |
| | | "(E) title which was on the specification as filed a identifying the application for which it was intended of the series code and the serial number, e.g., 08/123 any statement(s) to the contrary, it will be presumed application which the inventor(s) executed by signing M.P.E.P. § 601.01(a), 7th Ed. | by either the application number (consisting 456), or serial number and filing date. Absent to that the application filed in the PTO is the |
| (c) [| 7 | was described and claimed in PCT | Intermedianal Access 13 |
| (Ο) ι | | filed on | and as |
| • | | amended under PCT Article 19 on | and as (if anv). |
| | | | |
| | | | • |

(Declaration and Power of Attorney [1-1]—page 2 of 7)

SUPPLEMENTAL DECLARATION (37 C.F.R. § 1.67(b))

| (com | plete the following where a supplemental declaration is being submitted) |
|------|---|
| | I hereby declare that the subject matter of the |
| | ☐ attached amendment |
| | amendment filed on |
| | of my/our invention and was invented before the filing date of the original |

ACKNOWLEDGEMENT OF REVIEW OF PAPERS AND DUTY OF CANDOR

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information, which is material to patentability as defined in 37, Code of Federal Regulations, § 1.56,

(also check the following items, if desired)

- and which is material to the examination of this application, namely, information where there is a substantial likelihood that a reasonable Examiner would consider it important in deciding whether to allow the application to issue as a patent, and
 - in compliance with this duty, there is attached an information disclosure statement, in accordance with 37 C.F.R. § 1.98.

PRIORITY CLAIM (35 U.S.C. §§ 119(a)-(d), (f) 172, and 365(a) and (b))

NOTE: 37 C.F.R. § 1.55 Claim for foreign priority.

"(a) An applicant in a nonprovisional application may claim the benefit of the filing date of one or more prior foreign applications under the conditions specified in 35 U.S.C. 119(a) through (d) and (f), 172, and 365(a) and (b).

(1)(i) In an original application filed under 35 U.S.C. 111(a), the claim for priority must be presented during the pendency of the application, and within the later of four months from the actual filing date of the application or sixteen months from the filing date of the prior foreign application This time period is not extendable. The claim must identify the foreign application for which priority is claimed, as well as any foreign application for the same subject matter and having a filing date before that of the application for which priority is claimed, by specifying the application number, country (or intellectual property authority), day, month, and year of its filing. The time period in this paragraph does not apply to an application for a design patent.

(ii) In an application that entered the national stage from an international application after compliance with 35 U.S.C. 371, the claim for priority must be made during the pendency of the application and within the time limit set forth in the PCT and the Regulations under the PCT."

(2) The claim for priority and the certified copy of the foreign application specified in 35 U.S.C. 119(b) or PCT Rule 17 must, in any event, be filed before the patent is granted. If the claim for priority or the certified copy of the foreign application is filed after the date the issue fee is paid, it must be accompanied by the processing fee set forth in § 1.17(i), but the patent will not include the priority claim unless corrected by a certificate of correction under 35 U.S.C. 255 and § 1.323

I hereby claim foreign priority benefits under Title 35, United States Code, §§ 119(a)–(d) of any foreign application(s) for patent or inventor's certificate or of any PCT international application(s) designating at least one country other than the United States of America listed below and have also identified below any foreign application(s) for patent or inventor's certificate or any PCT international application(s) designating at least one country other than the United States of America filed by me on the same subject matter having a filing date before that of the application(s) of which priority is claimed.

(Declaration and Power of Attorney [1-1]—page 3 of 7)

(complete (d) or (e))

(d) 🛮 no such applications have been filed.

| OUNTRY (OR INDICATE IF PCT) | APPLICATION NUMBER | DATE OF FILING (day, month, year) | PRIORITY CLAIMEE UNDER 37 USC 11 |
|---|--|--------------------------------------|---|
| | | | ☐ YES NO ☐ |
| | | | ☐ YES NO ☐ |
| | | | ☐ YES NO ☐ |
| | | | ☐ YES NO ☐ |
| ľ | • | | 1 |
| hereby claim | the benefit under Title 35, t | § 119(e)) United States Code, | • |
| hereby claim ites provisiona | (34 U.S.C. the benefit under Title 35, lal application(s) listed below: | § 119(e)) United States Code, | APPLICATION(S) § 119(e) of any Ur |
| hereby claim ites provisiona | (34 U.S.C. the benefit under Title 35, the land | § 119(e)) United States Code, | APPLICATION(S) § 119(e) of any Ur FILING DATE |
| hereby claim ites provisiona OVISIONAL A 60 / 429, | (34 U.S.C. the benefit under Title 35, the penefit under the p | § 119(e)) United States Code, | APPLICATION(S) § 119(e) of any Ur |
| hereby claim ates provisiona OVISIONAL A | (34 U.S.C. the benefit under Title 35, the land | § 119(e)) United States Code, | APPLICATION(S) § 119(e) of any Ur FILING DATE |

| ALL FOREIGN APPLICATION(S), <i>IF ANY</i> , FILED MORE THAN 12 MONTHS (6 MONTHS FOR DESIGN) PRIOR TO THIS U.S. APPLICATION |
|---|
| |
| |
| NOTE: If the application filed more than 12 months from the filing date of this application is a PCT filing forming the basis for this application entering the United States as (1) the national stage, or (2) a continuation divisional, or continuation-in-part, then also complete ADDED PAGES TO COMBINED DECLARATION AND POWER OF ATTORNEY FOR DIVISIONAL, CONTINUATION OR C-I-P APPLICATION for benefit of the prior U.S. or PCT application(s) under 35 U.S.C. § 120. |
| POWER OF ATTORNEY |
| I hereby appoint the following practitioner(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith. |
| (list name and registration number) Ian C. McLeod - Registration No. 20,931 Mary M. Moyne - Registration No. 35,962 |
| (check the following item, if applicable) |
| I hereby appoint the practitioner(s) associated with the Customer Number provided below to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith. |
| Attached, as part of this declaration and power of attorney, is the authorization of the above-named practitioner(s) to accept and follow instructions from my representative(s). |
| NOTE: "Special care should be taken in continuation or divisional applications to ensure that any change of correspondence address in a prior application is reflected in the continuation or divisional application. For example, where a copy of the oath or declaration from the prior application is submitted for a continuation or divisional application filed under 37 CFR 1.53(b) and the copy of the oath or declaration from the prior application designates an old correspondence address, the Office may not recognize, in the continuation or divisional application, the change of correspondence address made during the prosecution of the prior application. Applicant is required to identify the change of correspondence address in the continuation or divisional application to ensure that communications from the Office are mailed to the current correspondence address. 37 CFR 1.63(d)(4)." § 601.03, M.P.E.P., 7th Edition. |
| SEND CORRESPONDENCE TO DIRECT TELEPHONE CALLS TO: (Name and telephone number) |
| Address McLeod & Moyne, P.C. Ian C. McLeod 2190 Commons Parkway (517) 347-4100 Okemos, Michigan 48864 |
| ☑ Customer Number |
| (complete the following if applicable) |
| Since this filing is a continuation divisional there is attached hereto a Change of Correspondence Address so that there will be no question as to where the PTO should direct all correspondence |
| direct all correspondence. (Declaration and Power of Attorney [1-1]—page 5 of 7) |

DECLARATION

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

SIGNATURE(S)

- NOTE: Carefully indicate the family (or last) name, as it should appear on the filing receipt and all other documents.
- NOTE: Each inventor must be identified by full name, including the family name, and at least one given name without abbreviation together with any other given name or initial, and by his/her residence, post office address and country of citizenship. 37 CFR § 1.63(a)(3).
- NOTE: Inventors may execute separate declarations/oaths provided <u>each</u> declaration/oath sets forth all the inventors. Section 1.63(a)(3) requires that a declaration/oath, inter alia, identify each inventor and prohibits the execution of separate declarations/oaths which each sets forth only the name of the executing inventor. 62 Fed. Reg. 53,131, 53,142, October 10, 1997,

Full name of sole or first inventor Thomas Pinnavaia (GIVEN NAME) (MIDDLE/INITIAL OR NAME) FAMILY (OR LAST NAME) Inventor's signature 200 Country of Citizenship. Lansing, Michigan East Residence 5901 Sleepy Hollow Post Office Address 48823 <u>East Lansing</u>, Michigan Full name of second joint inventor, if any Jainisha Shah (GIVEN NAME) (MIDDLE INITIAL OR NAME) FAMILY (OR LAST NAME) Inventor's signature Date NOV 20 200 Country of Citizenship East Lansing, Michigan Residence Spartan Village, Post Office Address East Lansing, Michigan 48823-5745

MIDDLE INITIAL OR NAME)

East Lansing, Michigan

East Lansing, Michigan

Country of Citizenship

307 E. Pointe Lane #H7

Full name of third joint inventor, if any

Seong-Su

Residence .

(GIVEN NAME)

Inventor's signature

Post Office Address

Kim

FAMILY (OR LAST NAME)

Korea

(check proper box(es) for any of the following added page(s) that form a part of this declaration)

| | Signature for fourth and subsequent joint inventors. Number of pages added |
|---|---|
| | * * * |
| | Signature by administrator(trix), executor(trix) or legal representative for deceased or incapacitated inventor. <i>Number of pages added</i> |
| | * * * |
| | Signature for inventor who refuses to sign or cannot be reached by person authorized under 37 CFR 1.47. <i>Number of pages added</i> |
| | * * * |
| | Added page for signature by one joint inventor on behalf of deceased inventor(s) where legal representative cannot be appointed in time. (37 CFR 1.47) |
| | * * * |
| | Added pages to combined declaration and power of attorney for divisional, continuation, or continuation-in-part (C-I-P) application. |
| | □ Number of pages added |
| | * * * |
| | Authorization of practitioner(s) to accept and follow instructions from representative. |
| | |
| | * * * |
| t | (if no further pages form a part of this Declaration, hen end this Declaration with this page and check the following item) |
| | |
| | |
| | |

(Declaration and Power of Attorney [1-1]-page 7 of 7)

| | | er's D_ ket-No | MSU 4.1-6 | 26 | PATENT |
|----------|--------|--|---|--|---|
| ract | titior | ners и кегно Thomas J. | . Pinnavaro | () Carmrana | Shah and |
| X | Applio | a Ca | Kim \square | Patentee | |
| _ | • • | cation No. | | Patent No | |
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| | | STATEMENT | OF STATUS | AS SMALL EN | TTTON |
| | | (37 C.F.R. § 1.27 | (a)(3)—NUNP | KOFII OKGAN | IZA HOIV |
| i he | reby: | state that I am an offic pelow: | | | he nonprofit organization |
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| | (X) | University or other in | stitution of high | er education (loca | ated in any country) |
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| | | Nonprofit scientific | or educational u | nder statute of st | ate of the United States |
| | | of America (35 U.S. | C. 201(i)) | | |
| | | (Name of State | | |) |
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| orga | ınizat | y state that the nonpion, as defined in 37 d States Patent and tates Code, with rega | orofit organization C.F.R. § 1.27(a) Trademark Office and to the inventi | on identified abov (3), for purposes be under Sections ion described in | e qualifies as a nonprofit of paying reduced fees to 41(a) and (b) of Title 35, |
| | X | | ed herewith, with | n title as listed at | oove. |
| | | 10 10 10 11 11 | | | |
| | | | | | |
| | u | | | 10 - N F-44 | -Non-Profit [7-3]-page 1 of 3) |
| | | | | (Small Entity | |

I hereby state that rights under contract or law have been conveyed to, and remain with, the nonprofit organization, with regard to the above identified invention.

If the rights held by the nonprofit organization are not exclusive, each individual, concern or organization having rights to the invention is listed below* and no rights to the invention are held by any person, other than the inventor, who would not qualify as a person under 37 C.F.R. § 1.27(a)(1), if that person made the invention, or by any concern that would not qualify as a small business concern under 37 C.F.R. § 1.27(a)(2), or a nonprofit organization under 37 C.F.R. § 1.27(a)(3)

*NOTE: Separate statements should be obtained from each named person, concern or organization having rights to the invention as to their status as small entities.

Each such person, concern or organization having any rights in the invention is listed below:

| No such person, concern or organization exists.□ Each such person, concern or organization is listed below. | | | |
|--|--------------------------|--------------------------|--|
| Name | | | |
| Address | | | |
| INDIVIDUAL | ☐ SMALL BUSINESS CONCERN | □ NONPROFIT ORGANIZATION | |
| Name | | | |
| Address | | | |
| ☐ INDIVIDUAL | SMALL BUSINESS CONCERN | □ NONPROFIT ORGANIZATION | |

I acknowledge the duty to file, in this application or patent, notification of any charge in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 C.F.R. § 1.27(g)(2))

NOTE: "The presentation to the Office (whether by signing, filing, submitting, or later advocating) of any paper by a party, whether a practitioner or non-practitioner, constitutes a certification under § 10.18(b) of this chapter by a party, whether a practitioner or non-practitioner, chapter. Violations of § 10.18(b)(2) of this chapter by a party, whether a practitioner or non-practitioner, may result in the imposition of sanctions under § 10.18(c) of this chapter. Any practitioner violating § 10.18(b) may also be subject to disciplinary action. See §§ 10.18(d) and 10.23(c)(15)." 37 C.F.R. § 1.4(d)(2).

| o: !== | Loraine J. Hudson |
|---------------------------|---|
| Name of Person Signing | Director of Intellectual Property |
| Title in Organization | |
| Address of Person Signing | MICHIGAN STATE UNIVERSITY OFFICE OF INTELLECTUAL PROPERTY |
| SIGNATURE A COLU | 238 ADMINISTRATION BLDG. EAST LANSING, MI 48824-1946 |
| | Loraine J. Hudson Pirochy of Intellectual Property |

(Small Entity-Non-Profit [7-3]-page 3 of 3)